the nuclear theory program at Brookhaven National Laboratory in September.

The Carl Zeiss Foundation has presented the 1999 Otto Schott Research Award to **Elias Snitzer** and **John H. Campbell** for "their exemplary work in the field of laser glasses." Snitzer is a professor emeritus of ceramic and materials engineering at Rutgers University. Campbell is the lead scientist for optical materials R&D for the National Ignition Facility at Lawrence Livermore National Laboratory.

In September, **Margaret Murnane** and **Henry Kapteyn** moved to the University of Colorado at Boulder, where they are professors in the physics department as well as fellows of JILA. The couple had been in the electrical engineering department at the University of Michigan.

In May, the European Optical Society awarded the European Optics Prize 1998 to the research group of **Franco Gori**, **Massimo Santarsiero**, **Silva Vicalvi**, **Riccardo Borghi**, and **Giorgio Guattari**, who are at the University of Rome I ("La Sapienza") and the University of Rome III. The prize includes an award of 1500 euros (about $1580).

Last month, the Maria Mitchell Association, based on Nantucket, presented its third Women in Science Award to Lucent Technologies, Bell Laboratories, in recognition of the organization's Graduate Research Program for Women. Bell Labs and the Lucent Foundation, in turn, donated the $5000 cash award—plus an additional $5000 in matching funds—to the first runner-up, the Math Science Network for Expanding Youth Horizons in Science and Mathematics, based at Mills College in Oakland, California.

OBITUARIES

Myron Lindsay Good

Myron Lindsay Good, a pioneer in developing the underpinnings of modern particle physics and in forging new particle physics facilities, died of heart failure on 26 February at his home on Long Island, New York.

Born on 25 October 1923 in Buffalo, New York, Good did his undergraduate work at the University of Buffalo and Cornell University in the years surrounding his service in the US Army during World War II. He earned his PhD in physics from Duke University in 1951 for his investigations of nuclear beta decay.

After graduation, Good worked as a research scientist in Luis Alvarez's group at the University of California's Radiation Laboratory in Berkeley. In 1959, he joined the physics faculty at the University of Wisconsin in Madison, and, in 1967, moved to Stony Brook, New York, to establish a new experimental group at the state university's fledgling campus, where he remained until his retirement in 1992.

Good's career was most remarkable for its exceptional breadth, which spanned the field of particle properties and interactions. With Alvarez in Berkeley, he was one of the first to explore the catalysis of nuclear reactions by muons. When the peculiar properties of the neutral K mesons were first seen—with weak eigenstates K_1 and K_2 rotated from

MYRON LINDSAY GOOD

the strong interaction production states K^0 and K_0—he introduced the phenomenology of regeneration of K_1 by interactions of K_2 in matter or magnetic fields. This insight provided the key to the measurements of the $K_1 - K_2$ mass difference and the implied limits on *CPT* invariance and transitions proceeding through two units of strangeness change. He pointed out that the near equality of the K_1 and K_2 masses implied that particles and antiparticles have the same mass independent of strangeness, thereby verifying the equivalence principle in a new regime.

With others, Good discovered in 1960 the first strange particle baryon resonance, the Y^* (1385).

His pioneering work in 1959 in establishing the $\Delta I = 1/2$ rule in weak hyperon decays became a problem that was to tantalize him for the rest of his life. He developed novel interpretations of the underlying physical cause, and, at the time of his death, was still pursuing his quest to understand this phenomenon.

In 1960, Good and William Walker at Wisconsin introduced the idea of diffraction dissociation and worked out the kinematic properties of this process by which high-energy beam particle waves can diffract into states of the same quantum numbers, but different final particle composition.

Good suggested new methods for discovering the W boson at Argonne and Brookhaven National Laboratories using decay muons produced by proton collisions in a massive target, a technique later used in many experiments.

Good made many contributions to experimental and accelerator techniques. With Philippe Eberhard and Harold Ticho, he developed improved electrostatic separators to provide the enriched beams of K mesons used for many strange particle discoveries at Berkeley in the 1960s.

At Stony Brook, Good initiated a program of experiments at Brookhaven's Alternating Gradient Synchrotron (AGS) that studied two-body scattering reactions with quantum number exchanges. These measurements advanced our understanding of the character of exchange forces in fundamental interactions. After the observation of anomalous production of leptons at large momentum transfer in hadron collisions at CERN and Fermilab in the 1970s, Good saw an opportunity to clarify the origin by making similar measurements at the lower energy of the AGS. An innovative experiment was mounted quickly leading to the observation that some anomalous excess did indeed remain at energies below the newly discovered charm threshold.

With the opening of the Fermilab accelerator in the early 1970s, Good, Leon Lederman, and their collaborators became involved in the study of inclusive two-particle final states in proton collisions on a massive nuclear target. These experiments helped establish the existing models of parton subprocesses in strong scattering and the character of parton fragmentation.

Near the end of his career, Good worked to develop the D0 experiment planned for the Fermilab proton–

antiproton collider. He delighted in the challenge of designing and building the novel uranium–liquid argon calorimeter and provided many of the project's ideas.

Good was strongly connected to the theoretical development of physics. Besides his introduction of the neutral K phenomenology and diffractive dissociation of the proton, he published influential papers in 1966 on neutral leptonic currents with Louis Michel and Eduardo DeRafael and in 1968 on the $\Delta I = 1/2$ rule with Michael Nieto. With Chen Ning Yang, he explored the effect of multiple collisions within the same particle–nucleus interaction, opening the way for subsequent investigations of multiple parton interactions in hadron collisions and the study of heavy-ion collisions.

One of his most enduring theoretical interests was the nature of collapsed stellar objects. Shortly after the first observation of pulsars in 1967, he developed a theory of pulsars as rotating neutron stars—independently of Thomas Gold. Treating these objects as massive generators with peculiar quasicrystalline composition, he was able to show remarkable agreement with observed pulsar period changes and radiation patterns.

Good helped to direct the larger community of particle physics in many ways. He served on several laboratory program advisory committees, including the one at Fermilab in its formative years. He served on the Universities Research Association's board of trustees in its early days. Good possessed remarkable insights into the way that research should and could be profitably conducted. His honesty and modesty were hallmarks, and his influence on the deliberations of science policy was profound.

We will remember Good for his many achievements. More than most, he made an impact upon the development of physics. He was an extraordinarily imaginative thinker, who saw connections and new ways of looking at problems. His development of a new generation at Stony Brook through his scientific leadership and the nurturing of young physicists has left its mark on the field and on the university. We will miss his clear-sighted and honorable approach to physics.

Paul D. Grannis
Janos Kirz
Michael D. Marx
Robert L. McCarthy
State University of New York
Stony Brook, New York

Melissa Charalambous

Melissa Charalambous, whose meticulous experiments led to several discoveries in the field of superconductors, died on 17 May in Athens, Greece.

Melissa was born on 26 April 1965 in Geneva, Switzerland, where her parents were working at the time. As a brilliant student at the Aristotle University of Thessalonìki in her home country of Greece, she was among a small number of students selected by the French Embassy in 1987 to undertake graduate study in France under a binational scholarship program. She chose the University of Grenoble, where she earned the French equivalent of a master's degree in physics in 1988.

Melissa Charalambous

For her PhD, which she earned in 1992, she moved to the Centre de Recherches sur les Très Basses Températures (CRTBT), where she demonstrated the melting of the vortex lattice in yttrium barium copper oxide (YBaCuO) by very precise magnetoresistance measurements along the c-axis in very small ($20 \times 50 \times 150$ μm) single crystals. To make the requisite transport measurements, she developed an entirely new three-dimensional lithography technique, for which the normal metal–superconductor interface needed exceptional care. In responding to that experimental challenge, she showed her ingenuity and knowledge of instrumentation, as well as the remarkable tenacity that so impressed all her colleagues. This landmark work brought her many conference invitations and also the city of Grenoble's Young Researcher Prize in 1993.

From 1992 to 1994, Melissa was a postdoctoral associate at IBM Corp's Thomas J. Watson Research Center in Yorktown Heights, New York. By very delicate local Hall magnetometry measurements of ultrapure untwinned YBaCuO or single crystals of barium strontium calcium copper oxide (BSCCO), she showed that the vortex lattice transition was of first order.

Joining the staff of the National Center of Scientific Research (CNRS) in 1994, she returned to the CRTBT, where she developed three principal lines of research that exemplified both her preference for the most lively topics in fundamental physics and her exploitation of sensitive experimental techniques.

First, by very precise measurements of very small thermal capacities, she demonstrated both the latent heat of fusion of the vortex lattice and also the asymmetry of the critical exponents in zero field at T_c on the specific heat curve of a very pure YBaCuO single crystal. Second, she initiated an angle-resolved tunnel effect study to determine the symmetry of the order parameter of high-T_c superconducting compounds. Third, in collaboration with chemical synthesis laboratories, she took an active interest in the preparation of new superconducting materials based on mercury.

Dynamic and warmhearted, Melissa knew how to spread her enthusiasm to those around her. The quality of her results brought her invitations to various conferences, where the audiences appreciated her power to convince. Her qualities as a group leader and her open-mindedness became apparent early in her brief career. Responsible for two thesis students and two postdocs, she also set up a network of collaborations involving researchers in Grenoble, the US, Canada, and several other European countries. Conscious, too, of the need for links with industry, she was the driving force behind an initiative supported by the French Rhône-Alpes administrative region concerning new Hall effect field sensors.

Supported by a particularly valiant family, she fought unremittingly against her illness. She was an example to all her colleagues at CRTBT and to all who knew her in the scientific community.

Jacques Chaussy
Centre de Recherches sur les Très Basses Températures
Grenoble, France ■